

BIRDS COLLECTED BY DR. W. L. ABBOTT AND MR. C. B. KLOSS IN THE ANDAMAN AND NICOBAR ISLANDS.

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The following list is based on a collection numbering about 520 specimens, obtained at various points in the Andaman and Nicobar islands by Dr. W. L. Abbott and Mr. C. B. Kloss, during the months of January, February, and March, 1901. Most of this time was devoted to the less-known islands of the last-named group, particularly Great and Little Nicobar, as the Andamans have recently been more or less thoroughly explored by Mr. A. L. Butler, who has published the results of his work¹ in a journal inaccessible to me.

The collection forwarded to the United States National Museum by Dr. Abbott contains nearly 100 species, of which 9 appear to be new, namely: *Zosterops ventralis*, *Sturnia erythropygia katchalensis*, *Rhinomyias nicobarica*, *Arachnechthra klossi*, *Pitta abbotti*, *Spilornis klossi*, *Astur obsoletus*, *Osmotreron chloroptera andamanica*, and *Ercalactoria trinkutensis*.

All of the specimens are supplied with accurate data, in addition to which the collector has sent notes, in some cases quite extensive, on the habits and distribution of the various species.

Hume's elaborate paper on the birds of these islands² gives in detail the topography and physical characteristics of the two groups, and it is unnecessary here to more than mention the localities visited by Messrs. Abbott and Kloss.³

These are as follows: Barren Island, January 6 and 7; Henry Lawrence Island (anchored in Kwantung Strait), January 8 to 11; MacPherson Strait, between South Andaman and Rutland islands (including adjacent mainland), January 14 to 17; North Cinque Island, January 18; Little Andaman (Bumila Creek, at the north end of the island),

¹Journal of the Bombay Natural History Society, XII, 1899.

²Stray Feathers, II, 1874, pp. 1-324, with map.

³See also a paper by Mr. G. S. Miller, jr., on the mammals collected by Dr. Abbott, in these Proceedings, XXIV, 1902, pp. 751-795, with map.

January 19 and 20. In the Nicobars, Car Nicobar (Mus, a village on the northern peninsula of the island), January 21 to 27; Tillanchong (a bay on the west side, at foot of Maharani Peak), January 29 to February 1; Trinkut (in Beresford Channel, at southwest corner of the island), February 1 to 5; Nankauri and Kamorta (Nankauri Harbor and neighborhood), February 5 to 11; Kamorta (Dring Harbor, west coast), February 11 to 15; Katchal (West Bay), February 16 to 24; Little Nicobar (anchorage back of Pulo Milu), February 25 to March 4; Great Nicobar (bay southeast of Pulo Kondul, March 5 to 10; Ganges Harbor, March 10 to 16; Pulo Kunyi, March 17 to 21; Pulo Nyer, March 21 to 24; Pulo Rotan, March 24 to 26; Galathea Bay, March 27 to 30), March 5 to 30.

The sequence of species followed in the present list is that of the "Fauna of British India" (Blanford and Oates).

Measurements are given in millimeters, and have been taken from the dried specimens, except that of total length, which in all cases has been supplied by the collector from the fresh bird.

Family CORVIDÆ.

CORVUS MACRORHYNCHOS Wagler.

C[orvus] macrorhynchus WAGLER, Syst. Avium., I, 1827 [p. 313] (Sumatra and Java).

"Pretty common at Lawrence Island and South Andaman." Three specimens were obtained on the first-named island. The total length, as given on the labels, varies from 482.5 mm. to 508 mm.¹

Family ZOSTEROPIDÆ.

ZOSTEROPS PALPEBROSA NICOBARICUS (Blyth).

Z[osterops] nicobaricus BLYTH, Journ. Asiat. Soc. Bengal, XIV, Pt. 2, 1845, p. 563 (Nicobars).

"Common in Car Nicobar, less so in Trinkut, Kamorta, and Katchal. Not observed in the southern islands (Great and Little Nicobar)." In the Andamans it was found to be "common on North Cinque," and on Barren Island it was "the commonest bird."

This form is readily distinguished from *Z. palpebrosa* by its longer bill, shorter tail, and generally lighter color above.² The total length ranges from 108 mm. to 120.5 mm., the smallest examples being from Car Nicobar, and the largest from the Cinque Islands.

ZOSTEROPS VENTRALIS, new species.

Type.—Adult female, No. 178798 U.S.N.M.; Car Nicobar, January 24, 1901; Dr. W. L. Abbott. Entire upper parts, including sides of

¹The collector's measurements have been reduced from inches to millimeters.

²See also Hume, Stray Feathers, II, 1874, p. 242.

head and neck, and edges of wing feathers, olive green, the outer webs of basal half of tail feathers edged with the same color; tail and wing feathers clove brown; cheeks and throat olive yellow; breast, sides of body, thighs, and flanks, pale smoke gray; center of abdomen and under tail-coverts, canary yellow; lores and feathers under eye black; a narrow ring of feathers round the eye, white; under wing-coverts and axillaries, white; inner webs of wing feathers white on under surface.

Length (of fresh specimen), 111 mm.; wing, 53; tail, 37.5; tarsus, 15; culmen, 11.5 (bill from gape, 15) mm. "Iris brown, bill and feet plumbeous."

The single individual obtained differs from *Z. aureiventris* in its darker yellow throat, darker sides and upper parts, and uniformly darker plumage.

Family PYCNONOTIDÆ.

IRENA PUELLA (Latham).

[*Coracias*] *puella* LATHAM, Index Orn., I, 1790, p. 171 (India).

One specimen only, a male from Henry Lawrence Island. Length of the fresh bird, 254 mm. "Iris red." It was also observed on South Andaman.

OTOCOMPSA EMERIA (Linnæus).

[*Motacilla*] *emeria* LINNÆUS, Syst. Nat., 10th ed., I, 1758, p. 187 (Benghala).

"Introduced. Common about the old convict settlement on Kamorta; a few seen at Dring Harbor, same island." Two skins are in the collection from this island, and a third from Nankauri. At the Andamans it was "common on South and Little Andaman." Nine specimens were collected, of which five are from the Cinque Islands.

In plumage the birds from the Andamans and Nicobars are alike, but differ from Indian and Malay peninsula examples in being rather darker and browner above, with more extensive white tips on the rectrices. The Andaman birds have somewhat larger bills than those from other localities. The total length of birds in the flesh varies from 178 mm. to 203 mm.

IOLE NICOBARIENSIS (Moore).

Hypsipetes nicobariensis MOORE, in Horsfield and Moore, Catal. Birds Mus. East India Co., I, 1854, p. 257 (Nicobars).

"Common in the central group of islands, Tillanchong, Trinkut, Nankauri, Kamorta, and Katchal. Not seen elsewhere. It occasionally congregates in assemblies of 50 or more, in some large tree, where they make a great chattering and uproar."

Thirteen specimens.

The total length, in the flesh, ranges from 216 mm. to 228.5 mm.

"Iris, brown; feet, greenish brown; bill, olive green, with yellow edges."

MICROTARSUS FUSCOFLAVESCENS (Hume).

Brachypodius fuscoflavescens HUME, Stray Feathers, I, 1873, p. 297 (S. Andaman).

One adult male, from South Andaman. "Iris, blue; feet, leaden blue; bill leaden, blackish at tip. Several seen." Length, 178 mm.

Family DICRURIDÆ.

DISSEMUROIDES ANDAMANENSIS (Beavan).

Dicrurus andamanensis "TYTLER," BEAVAN, Ibis, 1867, p. 323 (Andamans).

"Common on South and Little Andaman."

Six specimens. Length ranges from 292 mm. to 343 mm.

DISSEMURUS MALABARICUS (Scopoli).

Muscicapa (malabarica) SCOPOLI, Del. Flor. Faun. Insub., II, 1786, p. 96 ("China").

"Common in Great and Little Nicobar, less so in Katchal; none seen elsewhere. Frequents heavy forest, and is very easily 'called up.'"

Seven specimens, from the above-mentioned islands.

Hume has already referred¹ to the large crests of the Nicobar birds (which are almost identical with examples from the Mergui archipelago), as compared with those of the Andamans. This feature is so prominent that I do not hesitate to keep the two forms apart, but as to the right of the Nicobar bird to bear the name *malabaricus* I am not so certain.

The above specimens vary from 428.5 mm. to 558.5 mm. in total length.

DISSEMURUS MALABARICUS OTIOSUS, new name.

"Observed on Lawrence Island and Little Andaman."

Four skins, representing the above localities; those from Little Andaman are intermediate between this form and *D. malabaricus*, but are much nearer the former.

Total length of birds in the flesh ranges from 489 to 527 mm. This form, originally called *Edolius affinis*,² will require a new name, as there is an earlier *E. affinis*.³

¹Stray Feathers, II, 1874, p. 213.

²Beavan, Ibis, 1867, p. 323.

³Blyth, Journ. Asiatic Soc. Bengal, XI, 1842, p. 174.

Family SYLVIIDÆ.

LOCUSTELLA CERTHIOLEA (Pallas).

Motacilla certhiola PALLAS, Zoogr. Rosso-Asiat., I, 1811 (1826), p. 509 (region beyond lake Baikal):

One male, from Kamorta, collected February 10. "Iris, brown; legs, flesh-colored; feet and claws, pale brownish olive."

Apparently no previous record for the Nicobars.

CISTICOLA CISTICOLA (Temminck).

Sylvia cisticola TEMMINCK, Mamel d'Orn., 2d ed., I, 1820, p. 228 (Portugal).

Four specimens, all from Trinkut. "Common in the grassy lands of Trinkut, Kamorta, and Nankauri."

CISTICOLA, species.

On Great Nicobar a small bird, supposed to be a species of *Cisticola*, was found to frequent the grassy plains in the southern part of the island, along the upper Galathea River, but Messrs. Abbott and Kloss were so hurried in their trip up this river that no specimens were obtained.

ACANTHOPNEUSTE BOREALIS (Blasius).

Phyllopneuste borealis H. BLASIUS, Naumannia, 1858, p. 313 (Helgoland).

One adult, from Little Andaman.

ACANTHOPNEUSTE TENELLIPES (Swinhoe).

Phylloscopus tenellipes SWINHOE, Ibis, 1860, p. 53 (Amoy, China).

A single adult male was captured at sea about 10 miles east of Great Nicobar. It flew on board the vessel, April 1.

This species appears not to have been hitherto recorded from the Nicobars.

ACANTHOPNEUSTE LUGUBRIS (Blyth).

Phyllopneuste lugubris BLYTH, Ann. Mag. Nat. Hist., XII, 1843, p. 98 (near Calcutta).

Two specimens from Henry Lawrence Island, and one from MacPherson Strait, South Andaman.

Family LANIIDÆ.

LANIUS LUCIONENSIS (Linnæus).

[*Lanius*] *lucionensis* LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 135 (Luzon).

A male was shot at MacPherson Strait, South Andaman, and a female was obtained at Car Nicobar.

Family CAMPEPHAGIDÆ.

PERICROCOTUS ANDAMANENSIS Beavan.

Pericrocotus andamanensis "TYTLER," BEAVAN, Ibis, 1867, p. 322 (Andamans).

One specimen each from South Andaman and Henry Lawrence Island. "Shot in thick forest."

GRAUCALUS DOBSONI Ball.

Graucalus dobsoni BALL, Journ. As. Soc. Bengal, XLV, Pt. 2, 1872, p. 281 (Andamans).

Two specimens, male and female, are in the collection, from South Andaman, and a number of others were seen. The iris is noted as dark brown. Length of the female, 305 mm. The wing in the male is 170 mm.; in the female, 172.5 mm.

Family ORIOLIDÆ.

ORIOULUS MACROURUS Blyth.

O[riolus] macrourus BLYTH, Journ. As. Soc. Bengal, XV, 1846, p. 46 (Nicobars, central group).

Fourteen specimens, from Trinkut, Kamorta, and Great and Car Nicobar. "Common in all the islands visited."

ORIOULUS ANDAMANENSIS Beavan.

Oriolus andamanensis "TYTLER," BEAVAN, Ibis, 1867, p. 326 (Andamans).

Eleven specimens, collected in South Andaman, Henry Lawrence, Cinque Islands, and Little Andaman. It was reported to be "common at all collecting places."

Family EULABETIDÆ.

EULABES ANDAMANENSIS Beavan.

Eulabes andamanensis "TYTLER," BEAVAN, Ibis, 1867, p. 331 (Andamans).

"Common in Great and Little Nicobar, also seen in Katchal, and a few in Kamorta." It was observed on South Andaman, and a female was obtained on Rutland Island. The latter measures: Total length, 305 mm.; wing, 165 mm. "Bill and wattles reddish orange; feet yellow."

A male from Little Nicobar measures, in the flesh, 324 mm.; wing, 183 mm. "Iris, brown; feet, Indian yellow; wattles, bright yellow; bill, orange red, with yellow tip."

Males from Katchal have wings varying from 170.5 mm. to 177.5 mm.

CALORNIS TYTLERI Hume.

Calornis tytleri HUME, Stray Feathers, I, 1873, p. 480 (Port Mouat, South Andaman).

Twenty specimens from various islands in the Nicobar group. In total length these examples vary from 203 mm. to 228.5 mm.

"Found in all the islands visited. The color of the iris varied; all of those shot in Car Nicobar had brown irides, and all shot in the central group, Trinkut, etc., had white irides. It was certainly not the result of age or sex." The birds from Great and Little Nicobar are also marked as having white irides. (On this point see Hume¹).

Family STURNIDÆ.

STURNIA ANDAMANENSIS (Beavan).

Temenuchus andamanensis "TYTLER," BEAVAN, Ibis, 1867, p. 329 (Andamans).

"Common at South Andaman and North Cinque."

Six examples from the above localities are in the collection.

Length in fresh birds varies from 222 to 228.5 mm. Apparently not seen in the Nicobars.

STURNIA ERYTHROPYGIA Blyth.

Sturnia erythropygia BLYTH, Journ. As. Soc. Bengal, XV, 1846, p. 34 (Nicobars).

"Common in Car Nicobar, going about in flocks with *Calornis tytleri*. Especially frequents the cocoanuts and casuarinas. Not seen elsewhere."

Seventeen specimens of this rare species were obtained, all from Car Nicobar. Males measure 228.5 to 237 mm. in total length; females, from 222 to 251 mm.

Colors of fading parts, as mentioned on the labels, are: Iris, pale blue to china white; bill greenish yellow, base chalky cobalt; feet dull yellow to ochraceous; claws pale horny yellow.

STURNIA ERYTHROPYGIA KATCHALENSIS, new subspecies.

Sturnia erythropygia appears to be confined to the island of Car Nicobar. The Hume party found it only on that island, and Dr. Abbott did not meet with it elsewhere. *S. andamanensis*, according to both Hume and Davison, was found on the Nicobars only at Kamorta, but Dr. Abbott does not mention it from this group in his notes on the birds observed there. Hume, in referring to the occurrence of *S. andamanensis* in the Nicobars, says:²

I cannot feel at all certain that this species is indigenous in the Nicobars. We never saw it anywhere except in the immediate neighborhood of the settlement at Kamorta, at which station I understand that some twenty were let loose many years ago, having been brought down from Port Blair, where this species swarms. Even at Kamorta it is far from plentiful, and it does not seem at present to extend to any of

¹ Stray Feathers, I, 1873, p. 480.

² Stray Feathers, II, 1874, p. 249.

the closely adjacent islands of Nankauri, Katchal, or Trinkut, all of which Davison very thoroughly worked, or, indeed, even to the northernmost portion of Kamorta itself.

At the present day, not thirty years after Hume's notable trip, there exists on the island of Katchal a form of *Sturnia* which combines the characters of both *S. andamanensis* and *S. erythropygia*; whether this is a descendant of the birds liberated on Kamorta years ago, and originally from the Andamans, or a form long resident on Katchal and overlooked by previous collectors, is more than I am at present able to explain. It seems more probable, however, that the Katchal bird has been derived from the Kamorta stock and has become fairly numerous within recent years. It is not likely that Hume or Davison would have overlooked a bird of this character had it existed on the island in 1873. As to the bird of Kamorta, does it now occur there, and is it still *andamanensis*? Hume would have called attention to it had it differed from true *andamanensis* at the time of his visit. Dr. Abbott did not see any traces of it there during his recent trip.

The new form may be described as follows:

Type.—Adult male, No. 178629, U.S.N.M.; Katchal, Nicobars, February 20, 1901; Dr. W. L. Abbott. Whole head, neck, breast, sides, and upper abdomen white, with a slight grayish wash on crown; back, pale smoke gray, somewhat lighter on scapulars and passing into wood brown on the rump and upper tail-coverts; lower abdomen, under tail-coverts and flanks russet; thighs wood brown anteriorly, smoke gray behind. Wings, black, with metallic green reflections, most pronounced on coverts and secondaries; under wing-coverts and axillaries pure white; concealed bases of outer primaries and basal third of quill of second primary, white. Tail, black above, with metallic reflections as on wings; outermost pair of feathers russet on exposed portion of outer webs and for about 20.5 mm. on inner webs; the other rectrices tipped with russet, the tips becoming narrower toward the middle pair, which are merely edged with this color. Length, 219 mm.; wing, 106; tail, 71; tarsus, 25.5; culmen, 21.5. "Iris pale blue; bill yellow, base blue; feet ochraceous." Two females measure 209.5 mm. in total length.

The six skins of this form all differ from *S. erythropygia* in having the pale rump and upper tail-coverts of *S. andamanensis*, with the smaller dimensions of the latter.

ACRIDOTHERES TRISTIS (Linnæus).

[*Paradisea*] *tristis* LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 167 ("Philippinis").

One adult female, from Kamorta.

"Introduced. Only met with about the abandoned settlement at Nankauri Harbor, where they were pretty numerous."

Evidently of recent appearance in this locality, as Oates says¹ that it "does not extend to the Nicobars."

¹Fauna Brit. India (Birds), I, 1889, p. 537.

Family MUSCICAPIDÆ.

MUSCITREA GRISOLA (Blyth).

T[ephrodoris] grisola BLYTH, Journ. As. Soc. Bengal, XII, Pt. 1, 1843, p. 180* (near Calcutta).

Six specimens, from Henry Lawrence Island, Barren Island, South Andaman, and Cinque Islands.

ALSEONAX LATIROSTRIS (Raffles).

Muscicapa latirostris RAFFLES, Trans. Linn. Soc. Lond., XIII, Pt. 2, 1822, p. 312 (Sumatra).

Five specimens, from South Andaman, Barren, Rutland, and Cinque islands.

TCHITREA NICOBARICA (Oates).

Terpsiphone nicobarica OATES, Fauna Brit. India (Birds), II, 1890, p. 48 (Andamans and Nicobars).

“Not met with in Car Nicobar or Tillanchong, but fairly common in all the other islands. Adult males, white ones, seen only in Great and Little Nicobar.”

Eleven specimens, mainly from Katchal; one specimen each from Kamorta, Nankauri, and Trinkut, and two males in white plumage from Great Nicobar. The latter differ from the corresponding phase of *T. affinis* only in the central tail feathers, which are much broader near the tips. The young males resemble the female, lacking the glossy blue-black throat and sides of head of older birds.

The white males from Great Nicobar each measure 451 mm. in total length; the fresh colors, as stated on the labels, are: “Iris, dark brown; orbital skin, blue; bill, blue, tip and commissure, black; feet, leaden blue.”

A Katchal female has a total length of 293 mm.; another from the same island measures 186.5 mm.

RHINOMYIAS NICOBARICA, new species.

Type.—Adult male, No. 178740, U.S.N.M.; Pulo Kunyi, Great Nicobar, March 20, 1901; Dr. W. L. Abbott. Top of head, back, scapulars, and rump, brown (between bistre and raw umber), brightest on the back; upper tail-coverts and tail burnt umber; wings dark brown, the feathers edged with the color of the back, lighter on the primaries and burnt umber on the secondaries. Lores, and feathers about eyes, buff; cheeks, ear-coverts and sides of neck similar to the crown, but lighter, the ear-coverts with light shaft streaks; throat and abdomen, white; breast with a narrow band of wood brown (feathers of the breast buffy white, edged with wood brown); sides and flanks wood brown, the thighs drab; under tail-coverts, axillars

and under wing-coverts deep buff, the latter darker along edge of wing; inner webs of wing feathers with light buffy edges. Wing, 77.5 mm.; tail, 61; tarsus, 18; culmen, 14 (bill, from gape, 22). Length, 165 mm. "Iris, dark brown; feet, pale brownish fleshy; upper mandible dark horn brown, lower mandible pale fleshy."

There is some variation in a series of eleven specimens; in one the band across the breast is deep buff, with almost obsolete darker edges to the feathers; in several examples the under tail-coverts are dull white; some have the top of the head and back of the same shade of brown. In an immature specimen the middle and greater wing-coverts and feathers behind the eye have cinnamon spots, narrowly edged with black; the tertiaries are tipped with pale cinnamon; the throat is white, with the feathers indistinctly edged with dusky.

This species appears to be most nearly related to *R. pectoralis*, from the Malay Peninsula and Sumatra, but differs from it in having no whitish spots on the lores; the under wing-coverts, axillars, and under tail-coverts are not white; the white on the under surface is not so pure, and the upper parts are of a somewhat different shade of brown.

The genus *Rhinomyias* has not previously been recorded from the Nicobars.

"Common in Great and Little Nicobar. Keeps close to the ground, on low bushes in heavy forest. Has a rather sweet song."

HYPOTHYMIS AZUREA (Boddaert).

Muscicapa azurea BODDAERT, Tabl. Pl. Enl., 1783, p. 41 ("Philippines").

Fifteen specimens, from Nankauri, Trinkut, Tillanchong, Kamorta, Great and Car Nicobar.

"Common in all the islands, frequenting dense jungle."

HYPOTHYMIS TYTLERI (Beavan).

Myiagra tytleri BEAVAN, Ibis, 1867, p. 324 (Andamans).

Three specimens, from Henry Lawrence Island, Little and South Andaman.

Family TURDIDÆ.

GEOCICHLA ALBOGULARIS Blyth.

Geocichla albugularis BLYTH, Journ. Asiat. Soc. Bengal, XVI, 1847, p. 146 (Nicobars).

Eight specimens, from Trinkut, Kamorta, and Katchal. Length, from 190.5 to 203 mm. "Iris dark brown; orbital skin olive; bill black, pale leaden beneath, at base; feet pale brownish fleshy; claws pale horn brown. Common in the central group, i. e., Trinkut, Nankauri, Kamorta, and Katchal. Frequents the darkest parts of the jungle, keeping close to the ground."

Family PLOCEIDÆ.

MUNIA SEMISTRIATA Hume.

[*Munia*] *semistriata* HUME, Stray Feathers, II, 1874, p. 257 (Kamorta, Nicobars).

Seven specimens, representing Kamorta, Trinkut, Tillanchong, and Car Nicobar.

“Common in the islands with open grass lands. Not met with on the southern islands, which are covered with dense forest. Goes about in small flocks of six to ten.”

Family MOTACILLIDÆ.

BUDYTES FLAVA (Linnæus.)

[*Motacilla*] *flava* LINNÆUS, Syst. Nat., 10th ed., Pt. 1, 1758, p. 185 (Europe).

Three specimens, all from Trinkut.

“Common on Trinkut and Kamorta, frequenting the open grass lands and the shore.”

ANTHUS, species.

“Kloss shot one on Kamorta.” No specimens were sent. Hume records *Anthus cervinus* from this island.

Family NECTARINIDÆ.

ÆTHOPYGA NICOBARICA Hume.

Æthopyga nicobarica HUME, Stray Feathers, I, 1873, p. 412 (Kondul and Meroe, south Nicobars.)

“Only met with on Great and Little Nicobar. It was commonest at Pulo Kunyi and other places on the west coast of Great Nicobar.” It appears to be confined to the southern islands of the group; Hume met with it only on Kondul and Meroe. The female is without a trace of red on the throat, as Oates has predicted.¹ Females have a total length (in the flesh) of 111 mm.; males are slightly larger, measuring from 116 to 122 mm. “Feet dark fleshy brown; bill dark horn brown above, pale horny brown beneath.” A series of ten skins, from Great and Little Nicobar.

ARACHNECHTHRA KLOSSI, new species.

Type.—Adult male, No. 178787, U.S.N.M.; Great Nicobar, March 9, 1901; Dr. W. L. Abbott. Upper parts (except forehead and anterior part of crown), including sides of neck, ear-coverts, and lesser wing-coverts, olive green, darker on the upper tail-coverts; wings, clove brown, most of the feathers (except those of primary coverts) edged with olive green; tail, black, the middle feathers narrowly edged

¹ Fauna Brit. India (Birds), II, 1890, p. 350.

with metallic green, the three outer pairs with white tips, the outermost with white extending along outer web for about 14 mm.; the next two pairs very narrowly tipped (about 1 mm. only). Forehead, fore part of crown and throat, metallic purple, bordered on sides (including cheeks) and chest with metallic blue; just below the blue of chest, laterally, are a few burnt umber feathers. Breast, abdomen, sides of body, and under tail-coverts, lemon yellow; flanks, pale olive green; thighs, dusky brown, yellowish on inner aspect; axillars, cadmium yellow; longest under wing-coverts, white; lesser feathers, pale yellow; feathers of outer edge of under wing-coverts dusky, with yellowish tips. Length (fresh), 114 mm.; wing, 51; tail, 33; tarsus, 15; culmen, 18.5 (bill, from gape, 23). Other males have a wing measurement of 52 to 53 mm., and a total length of 108 to 117.5 mm.

This species differs from *A. pectoralis* in being slightly larger; there is less white on the outer tail feathers, and the lower part of the throat and chest is metallic blue instead of purple. The upper surface is somewhat darker than in *A. pectoralis*. "Common on all the islands visited. Breeding in February and March; we found the nests on Katchal, Great and Little Nicobar, generally in mangroves overhanging the creeks."

Seventeen specimens from the following islands: Car Nicobar, Trinkut, Tillanchong, Great and Little Nicobar.

ARACHNECHTHRA ANDAMANICA Hume.

Arachnechthra andamanica HUME, Stray Feathers, I, 1873, p. 404 (Andamans).

"Common at South Andaman and Cinque."

Eight specimens from the above islands. Length of males (six individuals) in the flesh, 114 to 118 mm.

Family PITTIDÆ.

PITTA ABBOTTI, new species.

Type.—Adult male, No. 178566, U.S.N.M.; Great Nicobar, March 30, 1901; Dr. W. L. Abbott. Closely related to *P. cucullata*,¹ but darker above and below, with lighter blue upper tail- and wing-coverts; a dark median line on crown; white patch on primaries much smaller and confined to six feathers instead of seven. *P. abbotti* is also smaller. Length, 184 mm.; wing, 110; tail, 39; tarsus, 39.5; culmen, 22 (bill, from gape 27). Other males have a wing measurement of from 103 to 105 mm.

"Iris dark brown; bill black, gape pale orange; feet pale brownish fleshy." Hume² saw several Pittas on Great Nicobar, which he

¹For permission to examine two Malacca specimens of *P. cucullata* in the Elliot collection I am indebted to the authorities of the American Museum of Natural History.

²Stray Feathers, II, 1874, p. 220.

thought to be *P. moluccensis*. Dr. Abbott has now obtained seven specimens, two of which were caught in traps set for small mammals.

“Common in Great and Little Nicobar. Like most Pittas it is rather difficult to obtain. I caught two in rat traps. Am not sure it is identical with the typical *P. cucullata*.”

Family PICIDÆ.

DRYOBATES ANDAMANENSIS (Blyth).

Picus andamanensis BLYTH, Journ. Asiat. Soc. Bengal, XXIX, 1859, p. 412, note (Port Blair, South Andaman).

One adult female, from Bumila Creek, Little Andaman.

“Upper mandible dark horn brown, lower mandible leaden. Also seen at Lawrence Island and South Andaman.”

Length in the flesh, 190.5 mm.

THRIPONAX HODGEI (Blyth).

M[ulleripicus] hodgei BLYTH, Journ. Asiat. Soc. Bengal, XXIX, 1860, p. 105 (Port Blair, South Andaman).

A pair from Henry Lawrence Island.

“Heard at South Andaman. Iris yellow.”

Length of male, 400 mm.; of female, 384 mm.

Family CORACIIDÆ.

EURYSTOMUS ORIENTALIS (Linnæus).

[*Coracias*] *orientalis* LINNÆUS, Syst. Nat., 12th ed., I, 1766, p. 159 (India orientali).

One female from South Andaman. Length, 301.5 mm.

“Iris dark brown. No others were seen.”

Family MEROPIDÆ.

MEROPS PHILIPPINUS Linnæus.

[*Merops*] *philippinus* LINNÆUS, Syst. Nat., 12th ed., Pt. I, 1766, p. 183, [errata] (Philippines).

“Common in the open lands and scrub jungle on Kamorta.” Three males were obtained on this island.

A bird identified by Dr. Abbott as a species of *Merops* was shot but lost on South Andaman.

Family ALCEDINIDÆ.

ALCEDO ISPIDA BENGALENSIS (Gmelin).

[*Alcedo*] *bengalensis* GMELIN, Syst. Nat., I, 1788, p. 450 (Bengal).

“Met with on all the islands [Nicobars] except Car Nicobar, and generally common among the mangroves.”

Four specimens, are included in the collection, from Tillanchong, Great and Little Nicobar. The differences mentioned by Hume¹ are not very plainly shown in this series.

CEYX TRIDACTYLA (Pallas).

Alcedo tridactyla PALLAS, Spic. Zool., Pt. 6, 1769, p. 10, pl. II, fig. 1.

"Common in Great and Little Nicobar, not met with elsewhere. Frequents the heavy forest, often at a distance from water, but is commonest along small streams."

Ten examples, all from Great Nicobar. In color they resemble birds from the Mergui Archipelago, but are of somewhat greater dimensions (wing from 57 to 62 mm.).

PELARGOPSIS INTERMEDIA Hume.

[*Pelargopsis*] *intermedius* HUME, Stray Feathers, II, 1874, p. 166 (Kondul, Nicobars).

"Common among the mangroves and along the seashore in Great and Little Nicobar. Do not think it is found in the other islands, as we searched carefully for it and did not meet with it, although it is a very conspicuous and noisy bird."

Five specimens, all females, from the two islands above mentioned. "Iris, dark brown; eyelids and feet red."

The total length, in fresh birds, varies from 362 to 387 mm.

HALCYON SATURATOR Hume.

[*Halcyon*] *saturator* HUME, Stray Feathers, II, 1874, p. 168. (Port Blair, South Andaman).

Four specimens, all from South Andaman, where it is reported to be "common." In two of the specimens the stomachs were found to contain the remains of small fish.

"Bill red, blackish at base above; eyelids, red; iris, brown; toes, red, front of tarsi and top of toes blackish."

Individuals vary in length from 292 to 305 mm.

HALCYON PILEATUS (Boddaert).

Alcedo pileata BODDAERT, Tabl. Pl. Enl., 1783, p. 41 (China).

"Met with on all of the islands [Nicobars], but apparently not very common, except in Great Nicobar, where it was numerous along the Galathea River."

A single individual was reported as seen on Barren Island, Andamans.

Two specimens were preserved.

¹Stray Feathers, II, 1874, p. 173.

HALCYON DAVISONI Sharpe.

Halcyon davisoni SHARPE, Cat. Birds Brit. Mus., XVII, 1892, p. 282 (Andamans).

“Common at South Andaman and Lawrence Island.”

Six specimens, from Cinque Islands and South Andaman.

The females have no buff on the under parts; an immature male, however, has a buffy wash on the flanks.

Two of the specimens had in their stomachs the remains of small fish and crabs.

HALCYON OCCIPITALIS (Blyth).

Todiramphus occipitalis BLYTH, Journ. Asiat. Soc. Bengal, XV, 1846, p. 23, note (Nicobars).

“Found in all the islands visited, commonest in the northern and central groups, less plentiful in Great and Little Nicobar. It frequents forest, clearings, and cocoanuts indiscriminately, and often found far from water.”

Eighteen examples from various islands of the Nicobar group. All of the females (seven skins) in this series are white below, having a small patch of buff on the flanks only.

The total length, as noted on the labels, varies from 241 to 273 mm. “Iris brown; upper mandible black, lower white; feet greenish mauve, claws black” (female).

Family MICROPODIDÆ.

“Swift. A large flock of swifts seen on Barren Island.”

Genus SALANGANA Isid. Geoffroy St.-Hilaire.

Salangana GEOFFR. ST.-HILAIRE, L'Écho du Monde Savant, III, 1837, p. 74.

Type, *Hirundo esculenta* Linnaeus.

Collocalia G. R. GRAY, List Genera of Birds, 1840, p. 8.

Type, *Hirundo esculenta* Linnaeus.

SALANGANA INEXPECTATA Hume.

[*Collocalia*] *inexpectata* HUME, Stray Feathers, I, 1873, p. 296 (Button Island, Andamans).

“Shot at Kamorta, seen occasionally on the other islands.” Three specimens are in the collection, all from Kamorta. “Iris brown; feet brownish pink, claws black.” Length, 120.5 mm.

SALANGANA LINCHI (Horsfield and Moore).

Collocalia linchi HORSFIELD and MOORE, Cat. Birds Mus. East India Co., I, 1854, p. 100.

Six examples, all females, from Little Nicobar.

“Met with on all of the islands [Nicobars]. On Little Nicobar, near the anchorage and water hole back of Pulo Milu, are some small

caves close to the seashore. These are inhabited by vast numbers of bats and a large colony of this swift. The largest cave was 60 feet long by 5 feet broad and 7 to 10 high. The floor was deeply covered with guano. The nests were at the farther end, thickly clustered upon the roof and upper parts of the walls. The nests were often so close to one another that the edges were adherent—three or four nests being stuck together in one mass.”

Family CUCULIDÆ.

? *SURNICULUS LUGUBRIS* (Horsfield).

Cuculus lugubris HORSFIELD, Trans. Linn. Soc. Lond., XIII, Pt. 1, May, 1821, p. 179 (Java).

“A bird apparently of this species was shot in Katchal, but lost in the dense jungle.”

? *EUDYNAMIS HONORATA* (Linnæus).

[*Cuculus*] *honoratus* LINNÆUS, Syst. Nat., 12th ed., Pt. 1, 1766, p. 169 (Malabar).

Six specimens, from Car Nicobar and Barren Island. At the last-named locality it is “very common and feeds on fruit.” In three females the wings vary from 198 to 208 mm.; in the same number of males from 198 to 209.5 mm.

The males have a greenish gloss and the females are dark colored.

? *EUDYNAMIS HONORATA MALAYANA* Cabanis and Heine.

Eudynamis *malayana* CABANIS and HEINE, Mus. Heim., IV, Pt. 1, 1862, p. 52 (Sunda Islands and Sumatra).

Five specimens, from Great and Little Nicobar.

“Common in all islands visited [both forms included]. Most probably lay their eggs in grackles (*Eulabes*) holes, as it was a very common sight to see a female koel pursued by a grackle, both in a greatly excited state, shrieking and screaming with rage. They are generally detested by other birds. I think they also lay in nests of *Carpophaga*, as one could often call them up by imitating the deep hoarse coo of the fruit pigeon.”

Two males from this series have wing measurements of 220.5 and 227.5 mm.; they are large and bluish compared with specimens from Barren Island and Car Nicobar, and the females are pale-colored. One male from Little Nicobar is greenish in color, as in the individuals referred above to *E. honorata*; it has a wing only 198 mm. in length.

There appear to be two forms represented in the Andamans and Nicobars, but our material is far too meager to allow of a satisfactory disposition of the case, and I keep the birds apart here to direct attention to the matter.

Family PSITTACIDÆ.

PALÆORNIS MAGNIROSTRIS Ball.

P[alæornis] magnirostris BALL, Journ. Asiat. Soc. Bengal, XLI, Pt. 2, 1872, p. 278 (Andamans).

“Common at Lawrence Island and South Andaman. Heard at Little Andaman.” At the first-named locality it was numerous, “flying about in flocks of three or four to a dozen.”

Five specimens. “Iris pale lemon; bill red, tips of mandibles yellow; feet yellow to orange; eyelids orange.” Length of males varies from 501.5 to 571.5 mm.; a female measures 458 mm.

PALÆORNIS FASCIATUS (Müller).

Psittacus fasciatus MÜLLER, Natursyst., Suppl., 1776, p. 74 (Pondicherry).

“Common at all places visited [Andamans]. Visits the cultivated district about Port Blair in large flocks, causing great damage to the ripening paddy; large numbers are therefore killed annually.”

Several specimens, from Henry Lawrence Island, and South Andaman.

PALÆORNIS CANICEPS Blyth.

P[alæornis] caniceps BLYTH, Journ. Asiat. Soc. Bengal, XV, 1846, p. 23, note (Nicobars).

“Common on Great and Little Nicobar. It goes about in smaller flocks than the smaller species, generally keeping higher up in the trees, and is harder to get. Usually there are only two or three together. They are very noisy.”

Ten specimens, varying in length from 540 to 604 mm. in males, and 444.5 to 533.5 mm. in females.

“Iris orange red; cere and lower mandible black; upper mandible red; tip horny yellow; feet dull greenish leaden.”

PALÆORNIS NICOBARICA Gould.

Palæornis nicobaricus GOULD, Birds of Asia, VI, 1857, pl. vi (Nicobars).

“This parrot was common upon all the islands [Nicobars], generally in flocks, sometimes of twenty or thirty individuals. Very fond of fruit of the casuarina. Native name, *Talleh*.”

Twenty-six specimens, from Great, Little, and Car Nicobar, Katchal, Trinkut, and Tillanchong. The males in this series vary from 431.5 to 489 mm.; the females from 368 to 450.5 mm.

The iris is said to have an inner green circle and an outer yellow one; in some specimens it is noted as greenish white, yellowish white, or pale yellow.

PALÆORNIS TYTLERI Hume.

P[alæornis] tytleri HUME, Stray Feathers, II, 1874, p. 454 (Andamans).

"Common on Lawrence Island and South Andaman."

Three specimens from the above islands. Two females measured 309.5 and 343 mm. in the flesh; a male, 406.5 mm.

"Iris: Inner circle green, outer circle yellow; feet green; cere green; upper mandible red, lower black."

LORICULUS VERNALIS (Sparman).

Psittacus vernalis SPARRMAN, Mus. Carls., Pt. 2, 1787, No. XXIX.

"None shot. Seen and heard everywhere in the Nicobors."

Family BUBONIDÆ.

NINOX SCUTULATA (Raffles).

Strix scutulata RAFFLES, Trans. Linn. Soc. Lond., XIII, Pt. 2, 1822, p. 280 (Sumatra).

Three specimens.

A male from Car Nicobar measures 279.5 mm. It has a wing 206 mm. in length. Hume records a male from the same island with a wing measurement of 213.5 mm., and a total length of 286 mm.

From Katchal we have a female measuring 286 mm., with a wing barely 203 mm. Both of the above birds resemble in color those of India.

A male from Little Nicobar is not only smaller, but differs very much in color from the others. There is a fulvous suffusion of the lower surface, the white bars of the sides and abdomen and the white streaks on the breast being almost entirely obscured. The under tail-coverts are white, spotted, and barred with brown. In total length this specimen measures 273 mm.; the other dimensions are: Wing, 198; tail, 118; tarsus, 30; culmen, 20 mm. In this individual the iris was deep yellow; feet pale yellow.

The stomachs of two of the specimens contained beetles.

Family FALCONIDÆ.

SPILORNIS KLOSSI, new species.

Type.—Adult male, No. 178429, U.S.N.M.; Pulo Kuyi, Great Nicobar, March 20, 1901; Dr. W. L. Abbott. General color above, including greater wing-coverts, secondaries, and tertiaries, drab,¹ with a slight coppery sheen in certain lights, some of the feathers (especially of the secondaries, tertiaries, and greater wing-coverts) with narrow white tips; nape and sides of neck Isabella color;² top of head,

¹Ridgway's Nomenclature of Colors, pl. III.

²Idem, pl. III.

including long occipital feathers, black, the longer feathers with narrow tips of Isabella color; ear-coverts, cheeks, and malar region clear smoke gray;¹ throat buffy white, with an indistinct median stripe of smoke gray; breast buffy wood brown, becoming much paler on the abdomen, sides, thighs, and under tail-coverts; lesser and middle wing-coverts dark drab, prominently edged with white; axillaries and under wing-coverts like the abdomen, the outer portion of the under wing-coverts pale buffy white. Primaries black at the ends, some of the inner ones with narrow white tips; base of the wings (from below) white, the feathers with two dusky bars (only one bar on the outermost primaries). Tail light drab, with a broad black subterminal band, and a second narrower one near the middle, less distinct on the two inner pairs of feathers. Wing, 257 mm.; tail, 165; tarsus, 75; culmen, 33. "Length, 431.5. Iris yellow; cere, base of bill, and naked skin on side of head, yellow. Bill, tip black, middle bluish." This is a very distinct species, and one of the smallest of the genus. It is easily recognized by its unspotted underparts, gray patch on side of head, and very small size. Ten of the eleven specimens sent by Dr. Abbott are adult, and show the characters given in the above description. Some of them are a little darker below than the type, and in several the throat is more or less gray. In one female, doubtless a very old bird, the underparts are considerably darker than in the type, and the lower breast and sides are faintly spotted with buff; the lower sides and thighs are also narrowly barred with buffy wood brown.

The immature bird differs from the adults in having buffy tips to the feathers of the back, wing-coverts, top of head, and to the upper tail-coverts; the wing feathers are tipped with white, the tail is less prominently barred, and has three narrow bars instead of two. In this specimen the iris was "brownish gray; feet, dirty yellow; cere and orbital skin, yellow, with a greenish tinge."

The males measure (in the flesh) 419 to 431.5 mm.; two females are 457 mm. The stomachs of those shot contained the remains of lizards, rats, a small bird, and a pigeon (*Chalcophaps indica*).

This species is named in honor of Mr. C. Boden Kloss, who accompanied Dr. Abbott on his Nicobar and Andaman trip, and prepared many of the specimens of the present collection. *S. klossi* was found only on Great Nicobar, where it was common and quite tame.

SPILORNIS MINIMUS Hume.

Spilornis minimus HUME, Stray Feathers, I, 1873, p. 464 (Kamorta, Nicobars).

"One wounded but lost upon Trinkut, a pair shot on Kamorta, and half a dozen shot on Katchal, where they were common. On Little Nicobar we failed to secure any, although we saw several."

¹Ridgway, pl. II, No. 12.

The stomachs of three specimens contained the remains of lizards, another had portions of a fowl, and one a small crab. The males measure (in the flesh) 447.5 to 463.5 mm.; the females 457 and 470 mm. The Kamorta specimens are: Male, 470 mm.; female, 482.5 mm. The wings of the females measure 288 to 292 mm.; the males, 256.5 to 284.5 mm.

Most of the specimens were shot in dense jungle.

SPILORNIS, species.

“Heard on South Andaman. None shot.”

HALIÆETUS LEUCOGASTER (Gmelin).

[*Falco*] *leucogaster* GMELIN, Syst. Nat., I, Pt. 1, 1788, p. 257.

“Common along the sea-coast everywhere [Nicobars].” No specimens were preserved.

ASTUR BUTLERI Gurney.

Astur butleri GURNEY, Bull. Brit. Orn. Club, VII, 1898, p. xxvii (Car Nicobar).

Adult male. Length, 286 mm. “Iris orange yellow; feet yellow, claws black. Bill leaden, cere greenish. Stomach contained lizards.”

Adult female. Length, 317.5 mm. “Iris orange yellow; cere black, bill black, leaden beneath at base; feet yellow, claws black. Shot in heavy forest, where it appears to be common.” This species was found only on Car Nicobar, “where it appeared to be pretty common in a patch of heavy forest; not met with in the open ground or in the scrub jungle. The place was a long way from the anchorage, and we only visited it twice.” The male is very indistinctly barred below, and the middle and outermost pairs of tail feathers are entirely unbarred; the three pairs of rectrices next to the central ones have three bars. The female is much more prominently marked below, and the middle pair of rectrices has a subterminal black bar; the next three pairs have four bars.

ASTUR OBSOLETUS, new species.

Type.—Adult female, No. 178448, U. S. N. M.; Katchal Island, Nicobars, February 18, 1901; Dr. W. L. Abbott. General color of upper parts (including middle and greater wing-coverts, secondaries, and upper tail-coverts) gray¹, paler² on crown, nape, sides of neck, cheeks, and ear-coverts; lesser wing-coverts slate gray, becoming darker (slate color) on primary coverts and primaries, the latter being black on the inner webs at the tips. Lores, an ill-defined stripe over the eyes, throat, malar apex, thighs, abdomen, under wing- and tail-coverts, and axillaries white; breast and sides white, with obsolete bars of pale fawn color. Tail gray, narrowly tipped with white, the middle and outer pairs of feathers without bands, the others with five

¹Ridgway's Nomenclature of Colors, pl. II, No. 8.

²Idem, No. 10.

indistinct bars, more prominent on the inner webs. Inner webs of primaries and secondaries (except at tips) white, obscurely mottled with dusky. Wing, 192 mm.; tail, 157 mm.; tarsus, 52 mm.; culmen, 21.5 mm.; length, 330 mm. "Iris dark crimson; feet yellow; bill blackish at tip, horn blue at base; cere greenish; eyelids greenish. Stomach contained lizards." A second female measured 343 mm. "Iris crimson!! Stomach contained insects. Shot in dense jungle." A third individual, also a female, has a total length of 343 mm. "Iris red. Stomach contained lizards." This specimen has traces of immaturity in some black-tipped ferruginous feathers on sides of neck and on the scapulars.

This interesting hawk closely resembles *A. butleri* above, but is paler on the nape and sides of head; it differs also in the indistinct white superciliary line and white lores and throat. Below it resembles *A. butleri* in pattern, but with the reddish color on breast almost entirely absent. In *A. obsoletus* the irides are crimson; in *A. butleri* and allies they are orange or yellow.

Dr. Abbott saw five or six others on Katchal, but did not obtain them. "The bird called up easily, but generally lit so close to one that it was not desirable to shoot, and at the slightest movement they were off, and all were in dense jungle. In Kamorta I saw a small hawk which seemed like *A. butleri*, but failed to secure it."

This Kamorta hawk will doubtless prove to be *A. obsoletus*.

ASTUR SOLOENSIS (Horsfield).

Falco soloënsis HORSFIELD, Trans. Linn. Soc. Lond., XIII, Pt. 1, May, 1821, p. 137 (Java).

Twelve specimens, from Katchal, Great and Little Nicobar. The total length, in fresh birds, is noted as 273 to 298.5 mm. The iris is stated to be "brown" or "dark brown" in the males, and "lemon yellow" to "orange" in the females; those in an immature male were "brownish orange."

The individuals of this series vary greatly in the amount of ferruginous on the breast, but several of them are identical with a specimen from Korea.

"A small hawk, which may be this species, was first obtained in Katchal in dense forest. We afterwards found it common in Great and Little Nicobar. They 'called up' easily."

Von Pelzeln records a hawk under this name from Car Nicobar, which may possibly have been *A. butleri*.

FALCO PEREGRINUS Tunstall.

[*Falco*] *peregrinus* TUNSTALL, Oph. Britannica, 1771, p. 1 (Great Britain).

One adult male, from Kamorta.

"Shot near a small jheel, where it had just made a dash at a flock of teal [*Dendrocygna javanica*]. Iris dark brown." Length, 416 mm.

Family TRERONIDÆ.

OSMOTRERON CHLOROPTERA (Blyth).

Tr[eron] chloroptera BLYTH, Journ. Asiat. Soc. Bengal, XIV, Pt. 2, 1845 (1846), p. 852 (Nicobars).

“Common on all of the islands visited.”

There are eight specimens in the collection, from Trinkut, Nankauri, Tillanchong, Little and Great Nicobar.

Length varies from 317.5 to 333 mm. in males, and 305 to 324 mm. in females. “Feet dull purple; bill pale leaden, greenish at base and on cere; iris, inner circle blue, outer one pink.”

OSMOTRERON CHLOROPTERA ANDAMANICA, new subspecies.

Type.—Adult female, No. 178813, U.S.N.M.; Macpherson Strait, South Andaman, January 15, 1901; Dr. W. L. Abbott. Similar to *O. chloroptera* (Blyth), from the Nicobars, but rather smaller, colors somewhat darker above and below; breast and sides deeper yellowish green, and under tail-coverts more yellowish; the throat is yellower than in *O. chloroptera*. Wing, 165 mm.; tail, 91; tarsus, 26; culmen, 20. Length, 292 mm. “Bill leaden, cere and base of bill greenish.”

Another female measures: Wing, 168 mm.; tail, 98; tarsus, 26.5; culmen, 20. Length, 317.5 mm.

Three females of *O. chloroptera* measure:

Wing.	Tail.	Tarsus.	Culmen.
<i>mm.</i>	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>
175	99	28	20
171	98	25	18
170.5	98	24.5	20

The new form is “common at South Andaman.”

CARPOPHAGA ÆNEA (Linnæus).

[*Columba*] *ænea* LINNÆUS, Syst. Nat., 12th ed., Pt. 1, 1766, p. 283 (Moluccas).

One specimen, an adult male, from Rutland Island, Andamans. “Observed at South Andaman, Cinque, and Little Andaman. A number seen at Barren Island. Iris crimson.” Length, 431.5 mm.

CARPOPHAGA INSULARIS Blyth.

C[arpophaga] insularis BLYTH, Journ. Asiat. Soc. Bengal, XXVII, 1858, p. 270 (Nicobars); a *nomen nudum* here.

“Common on all these islands [Nicobars]. On Tillanchong and Trinkut they were remarkably tame; we easily shot them with the .32-cal. auxiliary barrels. They, with the megapodes, formed our staple diet in the Nicobars until we loathed the sight of them. The iris is crimson.”

Males vary in length from 425.5 to 470 mm.; females measure 431.5 to 457 mm. The weight of a male is noted as 1½ pounds. Thirty-four specimens were collected.

Blyth's name *insularis* as usually quoted is a *nomen nudum*, but I am at present unable to give a more satisfactory reference. Von Pelzeln's term *nicobarica*¹ may have to be used for this species, but for the present I prefer to retain *insularis*, as Blyth had a very careless way of instituting new names and it is not improbable that an earlier reference will be found. He was aware of a Nicobar form as early as 1849.²

MYRISTICIVORA BICOLOR (Scopoli).

Columba (bicolor) SCOPOLI, Del. Flor. Fann. Insub., II, 1786, p. 94 ("nova Guiana").

One specimen each from Kamorta, Trinkut, Little and Car Nicobar.

"Less common than the last in the northern islands, but very plentiful in the southern. At Little Nicobar large numbers used to roost on the islets of Trak and Treis, six or seven miles distant, and fly over every morning to Little Nicobar."

Also reported as seen at Barren Island, in the Andamans.

CALÆNAS NICOBARICA (Linnæus).

[*Columba*] *nicobarica* LINNÆUS, Syst. Nat., 10th ed., Pt. 1, 1758, p. 164 (Nicobars).

"Met with on all the islands [Nicobar group], but by far most plentiful upon Great Nicobar."

Nine specimens, from Katchal, Great and Little Nicobar. The females range from 355.5 to 368.5 mm. in total length; the males, 381 mm.

CHALCOPHAPS INDICA (Linnæus).

[*Columba*] *indica* LINNÆUS, Syst. Nat., 10th ed., Pt. 1, 1758, p. 164 (India orientali).

"Not seen on Car Nicobar, but common elsewhere."

Four specimens from Tillanchong, Katchal, Trinkut, and Great Nicobar. These measure, in the flesh, from 260 to 273 mm.

ALSOCOMUS PALUMBOIDES (Hume).

Carpophaga palumboides HUME, Stray Feathers, I, 1873, p. 302 (Port Mouat, South Andaman).

No specimens were obtained, but Mr. Kloss had a shot at one in the Nicobars.

MACROPYGIA RUFIPENNIS Blyth.

Macropygia rufipennis BLYTH, Journ. Asiat. Soc. Bengal, XV, 1846, p. 371 (Southern Nicobars).

"Not met with at Car Nicobar, but found on all the other islands. Most common on Katchal, where all those we shot had been feeding

¹Novara exped., Vögel, 1865, p. 105. ²See Cat. Birds Mus. Asiat. Soc., p. 231.

upon chillies (small red peppers) that had escaped from cultivation. Did not see many on Great Nicobar. Those in Katchal were mostly about the open ground and in the cocoanuts. The iris is composed of two rings, the inner one white or blue, the outer one crimson; the orbital skin is blue; feet dull red; bill dark horn brown, cere paler."

Eight specimens, from Kamorta, Katchal, Tillanchong, and Great Nicobar.

Males have a total length of 394 to 425.5 mm.; females, 390.5 mm.

Family PHASIANIDÆ.

EXCALFACTORIA TRINKUTENSIS, new species.

Type.—Adult female, No. 178575, U.S.N.M.; Trinkut Island, Nicobars, February 4, 1901; Dr. W. L. Abbott. Similar to the female of *E. chinensis*, but general coloration darker and richer; ground color of feathers of the back, scapulars, and sides of neck grayish, instead of brown; forehead, a broad superciliary band, cheeks and throat, fawn color,¹ paler on chin; entire underparts, except throat, barred. In the female of *E. chinensis* the abdomen is buffy white, unmarked; with this exception the pattern of coloration in the two forms is the same. Wing, 65 mm., tail, 22, tarsus, 24.5, culmen, 10. Length, 133.5. "Feet yellow."

One specimen only was collected, although reported as "common in the open grass lands of Trinkut and Kamorta."

Family MEGAPODIDÆ.

MEGAPODIUS NICOBARIENSIS Blyth.

Megapodius nicobariensis BLYTH, Journ. Asiat. Soc. Bengal, XV, 1846, p. 52 (Nicobars).

"Common in all the islands except Car Nicobar; whether it exists here we could not find out. We did not see any, but Solomans, the Madrassé catechist, said he had seen some in the heavy forest north of Kemios, and near the middle of the island. The natives gave contradictory accounts. We first met with them at Tillanchong, where at first we thought they were scarce, but they proved to be very common. Many of their nest mounds were on a sandy strip by the sea shore. The largest mound was 30 feet in diameter and 8 feet high, composed almost entirely of sand, with very few dead leaves. The temperature in the interior is much raised and feels hot to the hand, when one is engaged in digging out the eggs. This was an exceptionally large mound, and, having seen hundreds of mounds since that, should say the average diameter is 10 to 15 feet and 4 feet high.

The megapodes are not exactly shy, but they are difficult to shoot,

¹ Ridgway's Nomenclature of Colors, pl. III, no. 22.

in most places, as the jungle is so dense. Afterwards, in the dense forest in Katchal and in Great and Little Nicobar where the jungle is more open, we easily obtained all we wanted.

At first we thought *Megapodes* delicious eating, but we soon got tired of them. Their excrement is very foul, owing to their animal (insect and land shell) diet. The eggs are excellent when fresh.

A writer in the Government Gazette (of Port Blair) speaks of the impending extermination of the *Megapodes* from the practice of the natives robbing the nest mounds. There is not the slightest danger of this. Many of the mounds are in impenetrable jungles. The natives are but few and dying out rapidly in the southern and middle groups. The coast people are well-nigh extinct in Great and Little Nicobar. Even where the mounds are visited, all the eggs are not found, and the mounds exist in hundreds. Even on Pilu Milu, a very small island off Little Nicobar, there are plenty of *Megapodes* and mounds, and the island is and has always been inhabited."

Twenty-five specimens, from various islands, show little variation. In total length, males vary from 381 to 400 mm.; females from 374.5 to 409.5 mm. Females weighed 30 ounces to 2½ pounds (the latter being the one 409.5 mm. in length).

The fresh colors are noted as follows: "Eyelids red; sides of head vermilion; skin of throat pale mauve pink; iris clear brown; bill greenish horn; legs dull reddish, brown in front; soles dull ochraceous, claws black."

A female obtained on Tillanchong was "shot while digging a hole for its egg in the nest mound. The mound was situated just within the edge of the jungle by the seashore, and had several small coconut trees growing upon it. The dimensions of the mound were 8 feet high and 30 feet in diameter. It was composed almost entirely of sand, few leaves apparently. This bird's mate was shot a few moments previously on top of the same mound." The native name of the *Megapode* is "Kongáh."

In addition to a good series of the birds, Dr. Abbott sent over 30 eggs.

Family TURNICIDÆ.

TURNIX ALBIVENTRIS Hume.

[*ornis*] *albiventris* HUME, Stray Feathers, I, 1873, p. 310 (Port Mout, South Andaman).

"Common in Kamorta, in the open grass."

One adult male, from the above island. "Feet pale yellow brown; bill dark horn brown, yellow at base beneath." Length, 158.5 mm.

Family RALLIDÆ.

HYPOTÆNIDIA OBSCURIOR Hume.

[*Hypotænidia obscuriora* HUME, Stray Feathers, II, 1874, p. 302 (Andamans).

Two were "seen, and one shot on a patch of coarse grass by the sea-shore on South Andaman. One was seen on Little Andaman." Length of an adult female, 266.5 mm.

A dark-colored rail was seen on Kamorta, in the Nicobar group, and thought by Dr. Abbott to be of this or a closely related species.

AMAURORNIS INSULARIS Sharpe.

Amaurornis insularis SHARPE, Cat. Birds Brit. Mus., XXIII, 1894, p. 162 (Andamans and Nicobars).

An adult male, "shot at the hot spring" in Barren Island, measures 326.5 mm. "Iris umber; bill pale green, base of upper mandible orange brown."

In the Nicobars it is reported to be "common on all the islands, in dry jungle as well as in swampy ground."

Specimens were sent from Great Nicobar, Trinkut, Katchal, and Tillanchong. An adult from the last-named island measures 343 mm. "Iris reddish brown; feet yellow; bill greenish yellow, part between the eyes and nostrils orange-vermilion."

Family CEDICNEMIDÆ.

ORTHORHAMPHUS MAGNIROSTRIS (Vieillot).

Edicnemus magnirostris VIEILLOT, Nouv. Dict. d'Hist. Nat., XXIII, 1818, p. 231.

"A single pair seen at North Cinque."

One female, from the above island. This measures 520.5 mm. "Iris yellow; feet pale yellowish, claws dark horn brown."

Family DROMADIDÆ.

DROMAS ARDEOLA Paykull.

Dromas ardeola PAYKULL, K. Vet.-Akad. Handl., XXVI, 1805, p. 188, pl. viii (East Indies?).

No specimens collected. "Two were seen in Katchal, and twice large flocks were seen in Great Nicobar."

Family SCOLOPACIDÆ.

NUMENIUS ARQUATUS (Linnæus).

[*Scolopax arquata* LINNÆUS, Syst. Nat., 10th ed., Pt. 1, 1758, p. 145 (Europe).

No specimens preserved. Noted as "seen in Katchal and Great Nicobar."

NUMENIUS PHÆOPUS (Linnæus).

[*Scolopax*] *phæopus* LINNÆUS, Syst. Nat., 10th ed., Pt. 1, 1758, p. 146 (Europe).

Five skins; three from Nankauri and two from Kamorta. The length, in fresh birds, ranges from 438 to 444.5 mm.

“Common among the mangroves in all of the islands; many seen at West Bay, Katchal.”

It was also observed at South Andaman.

ACTITIS HYPOLEUCOS (Linnæus).

[*Tringa*] *hypoleucos* LINNÆUS, Syst. Nat., 10th ed., Pt. 1, 1758, p. 149 (Europe).

One male, collected at MacPherson strait, South Andaman. It is reported as “common along the seashore” in both the Andamans and Nicobars.

TOTANUS TOTANUS EURHINUS Oberholser.

Totanus totanus eurhinus OBERHOLSER, Proc. U. S. Nat. Mus., XXII, 1900, p. 207 (Lake Tsomoriri, Ladak).

Two males, from Kamorta and Car Nicobar. Total length, 263.5 and 279.5 mm.

“Generally distributed.”

GALLINAGO, species.

“We several times flushed snipe on Trinkut—none shot.”

Family **ARDEIDÆ.**

? **ARDEA MANILLENSIS** (Meyen).

Ardea purpurea var. *manillensis* MEYEN, Acta Acad. Leop.-Carol., XVI, suppl., p. 102.

“A smaller heron [than *A. sumatrana*] with a rufous neck was several times seen on Great Nicobar.”

ARDEA SUMATRANA Raffles.

Ardea sumatrana RAFFLES, Trans. Linn. Soc. Lond., XIII, Pt. 2, 1822, p. 325 (Sumatra).

None obtained.

“One flushed in a jheel in Trinkut; also seen in Katchal and Great Nicobar.”

BUBULCUS COROMANDUS (Boddaert).

Canceroma coromanda BODDAERT, Tabl. Pl. Enl., 1783, p. 54 (Coromandel).

An adult from Tillanchong.

DEMIGRETTA SACRA (Gmelin).

[*Ardea*] *sacra* GMELIN, Syst. Nat., I, Pt. 2, 1788, p. 640 (Tahiti).

“Seen at South Andaman,” but no specimens were obtained. On the Nicobars it was “generally to be seen along the seashore.”

BUTORIDES SPODIOGASTER Sharpe.

Butorides spodiogaster SHARPE, Bull. Brit. Orn. Club, III, 1894, p. xvii (Andamans and Nicobars).

"Common in the mangroves everywhere" throughout the Nicobars. An immature female was collected on Little Nicobar. This individual, which is full grown, measured 450.5 mm. in the flesh.

ARDETTA SINENSIS (Gmelin).

[*Ardea*] *sinensis* GMELIN, Syst. Nat., I, Pt. 2, 1788, p. 642 (China).

An adult female from Trinkut.

"Iris, yellow;" length, 381 mm.

ARDETTA CINNAMOMEA (Gmelin).

[*Ardea*] *cinnamomea* GMELIN, Syst. Nat., I, Pt. 2, 1788, p. 643 (China).

One adult female, obtained in Kamorta.

"Iris, yellow;" length, 387 mm.

Family ANATIDÆ.

DENDROCYGNA JAVANICA (Horsfield).

Anas javanica HORSFIELD, Trans. Linn. Soc. Lond., XIII, Pt. 1, May, 1821, p. 199 (Java).

A pair obtained in Kamorta, where they were found in a small jheel.

"Iris, dark brown; eyelids, yellow."